Appl. No. 09/215,630
Response dated: November 3, 2003
Reply to Office Action of July 2, 2003

Docket No. CISCO-0650
(032590-000039)

REMARKS/ARGUMENTS

Claims 1-44 are now pending.

The Examiner is thanked for his kind finding of allowable subject matter in claims 9-11, 23-30, and 39-41 if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1, 8, 31, and 42 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. The amendment also contains a correction of a minor error of a clerical nature. All other claims remain unchanged.

The 35 U.S.C. §103 Rejection

Claims 1-8, 12-22, 31-38, and 42-44 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Lin et al.* (U.S. Pat. No. 6,282,575 B1) in view of *Lemaire et al.* (U.S. Pat. No. 6,205,149 B1). This rejection is respectfully traversed.

According to M.P.E.P. §2143,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

Claim 1 defines a method for setting Quality of Service (QoS) bits of packets sent by a user of a data communications network. The claimed method includes (a) obtaining

Appl. No. 09/215,630
Response dated: November 3, 2003
Reply to Office Action of July 2, 2003

Docket No. CISCO-0650
(032590-000039)

a user service profile including a QoS level for the user in response to a user log-in

attempt to a service selection gateway (SSG), (b) routing all packets originated by the

user through the SSG during a session, (c) setting, in the SSG, the QoS bits of packets

originated by the user in accordance with the QoS level for the user, and (d) passing, after

said QoS bits have been set, said packets on to the data communications network, as

recited in claim 1. Claims 3, 12, 31, 33, and 42-42 also includes substantially the same

distinctive features as claim 1.

Lin discloses a general routing management mechanism in a network, in which a

network access server **104** and a routing manager **106** cooperatively route packets

originated from a client **108** to the network (see FIGS. 1 and 2 of *Lin*). However,

although the network access server **104** of *Lin* validates the client **108** when the client

108 attempts to login (i.e., when the client **108** sends login information to the network

access server **104**), the network access server **104** only receives authentication results

from an authentication server **102** (column 4, lines 42-43) but no other information

during the validation process **204** (FIG. 3 of Lin). As is well understood by one of

ordinary skill in the art, the authentication results merely indicate whether the client's

access is to be allowed or denied, and do not contain unnecessary information (such as a

user service profile) irrelevant to the authentication process.

In *Lin*, although the authentication server **102** may maintain the user information

within its database, since such information has already been stored in the database for

lookup operations, and the authentication server **102** does not send the user information

17

Appl. No. 09/215,630
Response dated: November 3, 2003
Reply to Office Action of July 2, 2003

Docket No. CISCO-0650
(032590-000039)

to the network access server **104** or the routing manager **106** (column 4, lines 38-43 of

Lin), no user information is *obtained in response to* a user log-in attempt. Thus, *Lin* fails

to teach or suggest obtaining a user service profile or any user information in response to

a user log-in attempt to a service selection gateway (SSG), as claimed in claim 1.

Furthermore, as the Examiner correctly mentions in the Office Action, *Lin* also

fails to teach or suggest setting the QoS bits accordance with the QoS level for the user.

However, the Examiner relies on *Lemaire* for this missing feature.

Lemaire teaches a QoS control mechanism. In *Lemaire*, however, the QoS bits

are set by a bridge/router (column 2, lines 34-37, FIGS. 1 and 2 thereof) in accordance

with "identified Source Address and Destination Address" in an IP header (column 1,

lines 45-53, column 4, line 66 to column 5, line 13 thereof), not in accordance with the

QoS level for the user included in the user profile. Thus, *Lemaire*'s mechanism actually

belongs to a conventional QoS approach where the edge routers are used to set QoS bits

based on the source IP address of the packet (see page 4, lines 3-5 of the present

specification). Such a conventional approach is rather inflexible since it is based solely

on pre-programmed IP addresses and creates administrative burdens in programming all

of the edge routers, and is also ineffective in handling many types of roaming users

and/or users with dynamically assigned IP addresses such as those obtained or leases

from dynamic host control protocol (DHCP) servers (see page 4, lines 5-10 of the present

specification). In addition, none of the cited references teaches or suggests obtaining or

using a user service profile including a QoS level for the user.

Accordingly, even if *Lin* should be modified by *Lemaire*'s teaching as the

Examiner alleges, the QoS bits in the combined system would be set in accordance with

the source and destination addresses in an IP header, not in accordance with the QoS

level in the user service profile obtained in response to the user's log-in attempt, as

claimed in claim 1.

Claim 5 defines a method for setting Quality of Service (QoS) bits of packets sent

by a user of a data communications network. The claimed method includes (a) receiving,

at a service selection gateway to which the user is in communication, a request from the

user to assign a particular Quality of Service level to at least one packet flow transmitted

by the user, (b) assigning, in response to said request, a Quality of Service level to said at

least one packet flow, (c) setting said QoS bits within said packets belonging to said at

least one packet flow received at the service selection gateway in accordance with said

Quality of Service level, and (d) transmitting said packets belonging to said at least one

packet flow to the data communications network. Claims 19, 35, and 44 also includes

substantially the same distinctive features as claim 5.

As discussed above, the alleged combination of *Lin* and *Lemaire* only teaches

setting QoS bits in accordance with the source and destination addresses in an IP header,

and thus does not teach or suggest receiving a *request* from the user to assign a particular

QoS level, assigning a QoS level in response to such a request, or setting QoS bits in

accordance with the requested QoS level, as recited in claim 5. It should be noted the

Appl. No. 09/215,630
Response dated: November 3, 2003
Reply to Office Action of July 2, 2003

Docket No. CISCO-0650
(032590-000039)

source and/or destination address in the IP header cannot be considered as a request to assign a particular QoS level since in *Lemaire* the QoS bits are automatically set in accordance with the data stored in the address cash.

Accordingly, it is respectfully requested that the rejection of claims based on *Lin* and *Lemaire* be withdrawn. In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Dependent Claims

Claim 2 depends from claim 1, claim 4 depends from claim 3, claims 6-8 (and 9-11) depend from claim 5, claims 13-18 depend from claim 12, claims 20-22 (and 23-30) depend from claim 19, claim 32 depends from claim 31, claim 34 depends from claim 33, and claims 36-41 depend from claim 35, and thus include the limitations of claim 1. The argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable at least for the same reasons.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Request for Allowance

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

Appl. No. 09/215,630
Response dated: November 3, 2003
Reply to Office Action of July 2, 2003

Docket No. CISCO-0650
(032590-000039)

If, in the opinion of the Examiner, an interview would expedite the prosecution of

this application, the Examiner is invited to call the undersigned attorney at the number

indicated below.

The Commissioner is hereby authorized to charge any additional fees or credit

any overpayment to Deposit Account 50-1698.

Respectfully submitted,
THELEN REID & PRIEST, LLP

Dated: November _3_, 2003

Masako Ando
Limited Recognition under 37 CFR §10.9(b)

Thelen Reid & Priest LLP
P.O. Box 640640
San Jose, CA 95164-0640
Tel. (408) 292-5800
Fax. (408) 287-8040

BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE
UNITED STATE PATENT AND TRADEMARK OFFICE

LIMITED RECOGNITION UNDER 37 CFR § 10.9(b)

Masako Ando is hereby given limited recognition under 37 CFR § 10.9(b) as an employee of Thelen, Reid & Priest LLP to prepare and prosecute patent applications wherein the patent applicant is the client of Thelen, Reid & Priest LLP, and the attorney or agent of record in the applications is a registered practitioner who is a member of Thelen, Reid & Priest LLP. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Masako Ando ceases to lawfully reside in the United States, (ii) Masako Ando's employment with Thelen, Reid & Priest LLP ceases or is terminated, or (iii) Masako Ando ceases to remain or reside in the United States on an H-1 visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Expires: January 1, 2004

Harry I. Moatz
Director of Enrollment and Discipline